

AMENDMENTS TO THE DRAWINGS:

Applicants propose amending “RAKE RECEIVER 1” in FIG. 1 to instead be “RAKE RECEIVER A”, to facilitate consistency between FIG. 1 and the portion of the specification describing FIG. 1.

Applicants propose amending “RAKE FINGER 1” in FIG. 1 to instead be “RAKE FINGER A”, to facilitate consistency between FIG. 1 and the portion of the specification describing FIG. 1.

Applicants propose amending “RAKE FINGER 2” in FIG. 1 to instead be “RAKE FINGER B”, to facilitate consistency between FIG. 1 and the portion of the specification describing FIG. 1.

Applicants propose adding the reference sign “200” to FIG. 2 as requested by Examiner.

Applicants propose changing the direction of the arrow flow between the block elements 8 and 31 in FIG. 2, as requested by Examiner.

Applicants propose completely connection the line connection between the block elements 32 and 328 in FIG. 7, as requested by Examiner.

Approval is respectfully requested.

REMARKS/ARGUMENT

The specification has been amended to overcome Examiner's objections to the specification and claims 32-34 and 46-49.

Claims 1-6, 8-18, 20-24, 26-31, 35-44 and 50-54 are allowed.

Claims 32-33 and 46-49, indicated as being allowable if rewritten or amended to overcome the objection(s) set forth in the Office action, have been so amended. Accordingly, Claims 32-33 and 46-49 stand allowable.

Claims 7, 19, 34 and 45 have been canceled. Accordingly, the 35 U.S.C. 112, first paragraph, rejection of Claims 7, 19, 34 and 45 is moot.

Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al. US Patent No. 6,154,443. Applicants respectfully traverse this rejection, as set forth below.

In order that the rejection of Claim 25 be sustainable, it is fundamental that "each and every element as set forth in the claims be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 25, as amended, requires and positively recites, a method for a communication system, comprising: "determining a plurality of **soft-decision regeneration factors** associated with a plurality of users, **each soft-decision regeneration factor from the plurality of soft-decision regenerator factors being uniquely associated with each user from the plurality of users**" and "canceling interference, for a first user from the plurality of users, from a received signal **based on the plurality of soft-decision regeneration factors excluding the soft-decision regeneration factor associated with the first user**".

In contrast, Huang specifically recites:

The decision unit 116 receives the block sum from the channel matched filter 114 and makes a data decision. If the data modulation of the data signal is BPSK, the decision unit determines whether the real part of the {formula on col. 7, line 26} is greater or less than 0 and generates a tentative decision $d_{1,i}$ of the present received symbol. If the data modulation of the data signal is QPSK, the decision unit determines whether the real part of the {formula on col. 7, line 35} and the imaginary part of the {formula on col. 7, line 40} is greater or less than 0 and generates a tentative decision $d_{1,i}$. In the QPSK example, the generated tentative decision $d_{1,i}$ is a complex signal (col. 7, lines 22-45).

At the i 'th stage of data detection for the present received symbol, the signal $H[k]$ from the channel frequency response estimation unit 128 and the tentative decision $d_{1,i}$ of the present symbol from the decision unit 116 are transmitted to an interference signal estimation unit 118 for producing the reconstructed interference signal. The interference signal estimation unit 118 is used to reconstruct the transmitted symbol of the user, which is the multiple access interference of user 1 to be used by the other users' uplink receivers. The reconstructed interference signal of user

1 is transmitted to the other users' uplink receivers for multi-user interference cancellation (col. 7, lines 46-58).

There is no teaching in the above portions of Huang, or any other location that Applicants could identify, that teaches or suggests that decision circuits 116 of CDMA Rake receivers 50 “determine a plurality of soft-decision regeneration factors associated with a plurality of users, each soft-decision regeneration factor from the plurality of soft-decision regenerator factors being uniquely associated with each user from the plurality of users”, as suggested by Examiner. As such, Huang fails to teach or suggest, “determining a plurality of **soft-decision regeneration factors** associated with a plurality of users, **each soft-decision regeneration factor from the plurality of soft-decision regenerator factors being uniquely associated with each user from the plurality of users**”, as required by Claim 25.

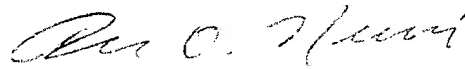
Further, Huang discloses the following regarding cancellation unit 110:

The multi-user interference cancellation unit 110 removes the reconstructed interference signals from other users from the signal $R[k]$ by using a first adder 122 and a second adder 124 to generate the signal remaining after multi-user interference cancellation which is denoted by $R_{1_i}[k]$. The index i of $R_{1_i}[k]$ is the i 'th stage of data detection of the present received signal (col. 5, lines 59-65).

Thus Huang generates a signal using first adder 122 and second adder 124 which remains after multi-user interference cancellation – it does not “canceling interference, for a first user from the plurality of users, from a received signal **based on the plurality of soft-decision regeneration factors excluding the soft-decision regeneration factor associated with the first user**”, as required by Claim 25. Accordingly, the 35 U.S.C. 102(a) rejection of Claim 25 is improper and must be withdrawn.

Claims 1-6, 8-18, 20-24, 26-31, 35-44 and 50-54 are allowed. Objected Claims 32-33 and 46-49 have been amended to be allowable. Claim 25 stands allowable as depending from allowable claims and including further limitations not taught or suggested by the references of record. Applicants respectfully request withdrawal of the rejections and allowance of the application as the earliest possible date.

Respectfully submitted,



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